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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/997,472	11/29/2001	Pradeep Trivedi	03226/139001; P6826	6172
32615	7590	11/07/2003	EXAMINER	
ROSENTHAL & OSHA L.L.P. / SUN 1221 MCKINNEY, SUITE 2800 HOUSTON, TX 77010			NGUYEN, HAI L	
			ART UNIT	PAPER NUMBER
			2816	

DATE MAILED: 11/07/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/997,472

Applicant(s)

TRIVEDI ET AL.

Examiner

Hai L. Nguyen

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AW

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 04 August 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1,3-6,18,19 and 23-27 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3-6,18,19 and 23-27 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 December 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Response to Amendment***

1. The amendment received on 08/04/03 has been reviewed and considered with the following results:

As to the rejections to claim 4, under 35 U.S.C. 112, 2nd paragraph, Applicant's amendments have overcome the rejections, as such; the rejections have been withdrawn.

The prior art rejections to the claims made in the previous Office Action mailed on 04/23/03 are now withdrawn in view of Applicant's amendments. Applicant's amendments and arguments have been considered but are moot in view of a new action on the merits appears below.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1, 3, 5, 6, 18, 19, and 23-27 are rejected under 35 U.S.C. 102(e) as being anticipated by Su et al. (US 6,404,289).

With regard to claims 1 and 18, Su et al. discloses Figs.2-4 a circuit, and a method of used thereof, comprising a phase locked loop having a phase-frequency detector (220), wherein

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the phase frequency detector inputs a system clock ( $f_{ref}$ ) and generates a chip clock (output of 240), and wherein the phase-frequency detector generates pulses on a first signal (UP) and second signal (DN) dependent on a relationship between the system clock and the chip clock; and a lock detect indicator (Fig.3) that uses the first and second signals to determine whether the phase locked loop is out of lock dependent on whether a pulse on the first signal or the second signal is longer than a predetermined pulse width.

With regard to claim 3, the lock detect indicator comprises circuitry (310-330) that generates a first lock indication pulse (output of 320) if a pulse on the first signal or second signal is longer than a predetermined pulse width; circuitry (340-370) that generates a second lock indication pulse (output of 360) dependent on the first lock indication pulse and a count value (output of 370); and circuitry (380) that uses the second lock indication pulse to dynamically generate a lock status signal, wherein the lock status signal (output of 360) is indicative of whether the phase locked loop is out of lock.

With regard to claim 5, the lock detect indicator comprises circuitry that outputs a past lock status signal (output of 320), wherein the past lock status signal indicates whether the phase locked loop has been out of lock.

With regard to claim 6, the lock detect indicator comprises an inherent reset circuitry that resets the lock detect indicator dependent on a reset input signal (Reset).

Claims 19 and 23-27 are similarly rejected. Note the above discussion with regard to claims 1, 3, 5, 6, and 18.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Su et al.

The above discussed circuit of Su et al. meets all of the claimed limitations except for the limitation that the lock detect indicator comprises circuitry that outputs second lock status signal, wherein the lock status signal is indicative of whether the phase locked loop is out of lock. However, it would have been obvious to one of ordinary skill in the art to duplicate the lock detect indicator so as to output a plurality of lock status signals. Therefore, it would have been obvious to one of ordinary skill in the art at the time of applicant's invention was made to utilize a plurality of lock detect indicators in the circuit of Su et al. to provide a plurality of lock status signals to other parts of the circuit.

***Conclusion***


6. In view of the new grounds of rejection, this action is non-final.


7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hai L. Nguyen whose telephone number is 703-306-9178 and Right Fax number is 703-746-3951. The examiner can normally be reached on Monday-Thursday.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy Callahan can be reached on 703-308-4876. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9318 for regular communications and 703-872-9319 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

HLN   
October 21, 2003

  
TIMOTHY R. CALLAHAN  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2800